

## MATERIA MEDICA AND PHARMACY.

8. *Observations on Discoloration of the Skin from the internal use of Nitrate of Silver, and on the means of preventing and removing that effect.* By CHARLES PATTERSON, M. D.—Nitrate of silver is undoubtedly a medicine of great service, especially in the treatment of various spasmodic diseases, but the danger of producing discoloration of the skin by its internal administration, prevents its employment as extensively as might otherwise be the case. It must therefore be an object of importance to devise some means of preventing that untoward effect.

Dr. Patterson first quotes the opinions of Dr. A. T. Thomson on the subject, who supposes that the nitrate is taken into the circulation undecomposed, and, arriving in that state at the capillaries of the skin, is there decomposed, and converted into chloride of silver, which is deposited in the rete mucosum. The chloride, he says, acquires a gray leaden colour from its contact with animal matter; and, as it is insoluble, it is incapable of being reabsorbed, is fixed in the rete mucosum, and a permanent stain is given to the skin. Dr. Thomson suggests that, by ordering diluted nitric acid, at the time of administering the salt, its decomposition may be effected.

In opposition to these views of Dr. Thomson, Dr. Patterson quotes various experiments which he has made, and then brings forward his own conclusions, viz. that the chloride of silver is not the colouring ingredient on which the blackness of the skin depends; but that the discoloration of the skin is most probably owing to the decomposition of the chloride of silver circulating in the cutaneous tissue through the chemical action of the sun's light, and the deposition there of its metallic basis. All persons are not subject to this accident; for the influence of the sun's rays can only be effective in those cases where the cutis is more than ordinarily vascular and is clothed with a thin transparent cuticle.

The permanence of the stain is not easily accounted for; but it would seem that the metals constitute one class of substances for which the absorbents have no attractive affinity, as is shown in those instances where bullets have remained for years in the body, in the use of metallic ligatures, and in the internal exhibition of quicksilver.

*Means of Prevention.—Nitric Acid.*—Dr. Patterson considers that the contemporaneous administration of nitric acid, with the intention of preventing the decomposition of the nitrate of silver, must be entirely useless. The nitric acid undergoes decomposition in its passage through the circulation, and consequently can hardly reach the surface of the body to influence the chemical changes there in operation: and even if it did, and met with nitrate of silver there, its action would be to promote and not to retard the formation of the chloride of that metal; for this reason, that coming into contact with the soluble muriates, it would decompose the muriatic acid, with the evolution of free chlorine.

The conclusion to which Dr. Patterson comes on this subject is, that the only way to prevent all risk of discoloration, would be to substitute for the nitrate, some preparation of silver not liable to be acted on by chlorine, or the sun's light. And happening to be employed in some photographic experiments, his attention was directed to the property displayed by solutions of the iodide of potassium in rendering nitrate of silver insensible to the influence of the sun's rays. When a piece of paper was washed with solution of nitrate of silver, and then immediately immersed for a few seconds in a solution of hydriodate of potash, its colour, even when exposed to the strongest sunshine, remained unaltered. It was evident, in this process, that the hydriodate and the nitrate were both decomposed, and that an ioduret of silver was the result. It then remained to be determined whether, in contact with animal matter or medicinally administered in combination with chemical agents, it would retain that power.

To ascertain this point various experiments were executed;—the ioduret was mixed with different animal and vegetable substances, and submitted to the ac-

tion of different chemical agents, and then exposed to the action of the sun, without, however, producing the least change of colour.

Having thus satisfied himself as to the chemical habitudes of the ioduret, Dr. Patterson's next endeavours were directed to ascertain its therapeutic effects. The first and principal class of diseases in which opportunities were afforded of administering it, were those various stomach affections to which the Irish peasantry are so very liable, and in which the internal use of nitrate of silver has been found to be most generally successful. They, therefore, afford the best criterion whereby to judge of the comparative efficacy of the ioduret. In such, a number of which Dr. Patterson relates, it proved almost uniformly beneficial. In epilepsy the result was not so satisfactory; but as the medicine was only administered in two cases, it has not had a fair trial in that disease. In whooping-cough it had variable success, but where that complaint was uncomplicated with fever or bronchitis, the ioduret appeared to produce an immediate improvement in the spasms, and hastened the final abatement of the cough. Sufficient time, however, has not yet been afforded, to allow of any definite conclusion to be come to on the subject.

*Removal of discoloration of the Skin.*—Dr. Patterson considers that “there can scarcely be a doubt that in those cases, where the skin has become discoloured from the long use of nitrate of silver, the discolouration may be removed by the internal and external employment of suitable preparations of iodine.”

The following is the formula which Dr. Patterson employs for the administration of the ioduret of silver.

R. Iodureti Argenti, Nitratis potassæ,  $\text{āā}$  gr. x., Tere simul ut fiat pulvis subtil. dein adde Pulv. glycyrrhizæ ʒss., Sacchari albi ʒj., Mucil. arab. q. s. M.—Fiant pil. xl. quarum sumat æger j. ter in die.—*Med. Chirurg. Rev.*, Oct. 1842, from *Dublin Med. Press*, Aug. 24, 1842.

9. *Creasote as a Therapeutic Agent.*—An interesting paper on this subject was read before the Medico-Chirurgical Society of Edinburgh, in July last, by Dr. Cormack; an abstract of which we copy from our esteemed cotemporary the *London and Edinburgh Monthly Journal of Medical Science*, (Oct. 1842.)

“NATURE OF ITS ACTION.—Dr. C. has satisfied himself, by experiments on the lower animals, that creasote, in large doses, is a narcotico-acrid poison; and that it resembles prussic acid in its sudden depressing action on the heart, as well as in the temporary nature of its toxicological operation. In medicinal doses, it is almost immediately sedative and calming; but these effects are of short duration; so that it is a drug which requires to be given in often-repeated small doses.

“I. INTERNAL ADMINISTRATION.—*Use in nausea and vomiting.*—Creasote is one of the best medicines which we possess for stopping vomiting. In the vomiting of pregnancy, an affection so distressing to the patient, it seldom fails. If the sickness come on regularly after rising in the morning, Dr. C. prescribes two or three drops to be taken five or ten minutes before getting out of bed. This generally proves effectual; but if it does not, the patient ought to be directed to repeat the dose in two hours. In more troublesome cases, when the sickness occurs at intervals during the day, one or two drops should be given every two, three, or four hours. Dr. C. has ordered it in a great many cases of this kind; but as it is only recently that he has kept accurate memoranda of them, he only communicated the result of his last eleven cases. Nine were completely relieved; one (a dispensary patient) was lost sight of, but supposed to be relieved; and another was in no degree improved. She was afterwards successfully treated by two drop doses of the medicinal prussic acid.

“*The sickness and vomiting following a drinking debauch.* Dr. C. saw speedily relieved in two instances, by one dose of four drops. In January, 1837, Mr. Waugh, (then surgeon and apothecary in the High Street of Edinburgh), told him that he had relieved several individuals in a similar state, by small doses of creasote; but that in others he had tried it without any good effect.

“*In sea-sickness,* Dr. C. had only one opportunity of seeing its effects. CASE.

—Last summer, when going up from Edinburgh to London by sea, he observed when getting under way, a gentleman leaning over the side of the ship very sick, beside whom was a bottle smelling strongly of creasote. It turned out, that he was a great martyr to sea-sickness, and had been advised by an apothecary, to whom he had applied for some remedy to be provided with, to take the creasote mixture which attracted Dr. C.'s attention; but that it had had an effect directly the opposite of what was intended; for no sooner did he swallow the first dose, than he was seized with retching. Upon the following day the weather was rough, and the creasote gentleman became exceedingly sick. In desperation he applied again to the reputed specific, when the very same dose that had on the previous day made him squeamish and sick, on this trial almost entirely relieved him. The quantity of creasote contained in his mixture was not ascertained. *It is well worthy of notice, as a general remark, that creasote though excellent in allaying vomiting, often excites it when it does not exist.* Vomiting is caused by creasote very frequently in cases where the dose is too large for the individual. If the statements of many can be relied on, it seems worthy of trial as a remedy in sea-sickness.

“In vomiting connected with hysteria, creasote proves a very valuable remedy, and so far as Dr. C.'s experience goes, he is inclined to think, that Dr. Elliotson and others, who have recommended it very strongly in this class of cases, have not done so without sufficient cause. In at least ten cases of this kind, Dr. C. has tried it in doses varying from two to eight drops, and in all, excepting one, it proved an admirable medicine, not only relieving the vomiting, but also apparently, in most instances, calming the nervous excitability. In the case in which it apparently did no good, the dose could not be increased beyond six drops thrice a day, on account of the vertigo which it occasioned. The patient was ultimately much benefited by sponging with cold water, and taking four grains of the saccharine carbonate of iron three times a-day. CASE.—Patient—A young woman, exhibiting many of the anomalous symptoms so common in hysteria. When first visited, she was emaciated, weak, nervous to a distressing degree: stated that she vomited her food, and had done so for ten days, but had had sickness in the mornings for a much longer period. She had been trying various tonics. None of them did her any good, and they were generally rejected soon after they were swallowed. Dr. C. ordered her to breakfast in bed, and that sparingly, on the morning following his visit, and half an hour before doing so, to take a dose of a mixture, containing three drops of creasote, in acetic acid. After her meal, she had only slight nausea. She sponged her chest with vinegar and water, and before a light dinner, repeated the dose, but had a good deal of vomiting, though not so much as usual. As the creasote had produced no giddiness or uneasiness of any kind, the quantity was increased on the following day to five drops before breakfast and dinner. For a week after this, she had neither nausea nor vomiting; but both having then slightly returned, for five days the dose was increased daily a drop, till at last, she was taking ten drops twice a-day. From this time the vomiting did not return for three weeks, during which time she persevered in the medicine, and under its use, daily gained strength and flesh; the catamenia, which had formerly been scanty, became much more abundant. As she now complained of headache, and attributed it to the creasote, it was discontinued, and the saccharine carbonate of iron substituted, in doses of four, and afterwards five grains, three times a-day, in pills made up with the extract of gentian. She continues to use the iron, and has latterly, with great benefit, taken the shower-bath. Once or twice the vomiting has returned, and been promptly relieved by the creasote. In this case, the creasote did more probably than relieve the vomiting. It is, however, proper to state, that along with the creasote, from the commencement of the treatment, great attention was paid to the bowels, which had formerly been neglected. She took the compound aloes and assafetida pill so as to have at least one stool daily, whereas formerly, she rested satisfied with two, or even with one a week; this of itself must have greatly contributed to the cure.

“In all of the hysterical cases of vomiting, there existed constipation, which

was actively dealt with; but as in the case now detailed, the vomiting was relieved by the creasote, before the purgative treatment could have developed its effects. From a number of cases, creasote appears to be valuable in hysteria, not only for the vomiting, but also in assisting to control many of the fantastic and distressing symptoms of this Protean malady.

*"In vomiting from various causes not yet specified,* creasote may be used with great benefit. In about twenty or thirty such cases Dr. C. has tried it with advantage. Of thirteen cases he has kept notes. Seven of these were phthisical. Relief was afforded in five of them. In the other two, it seemed to do no good whatever. In one of the seven successful cases, after morphia, strong coffee and other things which used to succeed with the patient, had failed, a dose of three drops stopped the retching in as many minutes. In three of the thirteen cases it was given to stop vomiting, caused by taking croton oil in neuralgia, and in every instance succeeded, though in one of the instances fifteen drops were required to be taken within half an hour. This is the largest quantity of creasote which Dr. C. administered within so short a time. In two of the thirteen cases, the patients were lost sight of; but the affections were supposed to be hysteria, or pregnancy. The result of the first doses was good. One of the cases may be briefly detailed. CASE.—A. E., a boy of about ten years of age, was under the treatment for tape worm, and had vomited one or two days before he was seen. During that and the preceding day, he had very severe vomiting, and had been unable to take either food or medicine. At the time of the first visit, he had retching every ten minutes. Creasote fortunately being at hand, one drop was immediately administered in a little mucilage. This did some good. The dose was repeated in ten minutes, and during the following hour he had neither vomiting nor retching; but at the end of this period, there being a return of the symptoms, a third dose was given. After this, they did not recur during the following eight days that the patient was under observation. Dr. C. saw this case along with Dr. David Macfarlane, now at Drymen. CASE.—The following case, which has been communicated by Professor Simpson, may be mentioned in this place. Some years ago he operated on a man at Falkirk for strangulated hernia. Great vomiting ensued, which did not yield to opium, though given in large doses, and a mustard blister was also applied over the stomach, without any good effect. One dose of two drops of creasote completely relieved the sickness and vomiting.

*"Combining creasote with drugs which have a tendency to produce nausea,* Dr. C. finds often answers very well, as many cases in the journals led him to expect. He has twice given it in combination with, in one case four, and in another six grains of sulphate of copper, as an astringent. In neither, was there sickness. Of course it is impossible to say with certainty, that this immunity from nausea was owing to the creasote.

*"When laid up with influenza* about three years ago, Dr. C. was taking a mixture containing tartar emetic, which produced considerable nausea and vomiting, which induced him to embrace the opportunity of observing the effect of creasote in such circumstances. He took two or three drops, which speedily checked the retching. After resting about an hour, he resumed the mixture, which again produced its emetic effect, and this was again arrested by a similar dose. He afterwards took occasion to repeat this observation on two patients. CASE.—The first was a young girl labouring under a bronchitic affection. He prescribed the tartar emetic solution in the morning, and returned some hours afterwards, when he found her very sick, and when he was beside her she vomited a little. She was directed to go on with the solution\* every hour as formerly, and immediately after each dose to take two drops of creasote. In the course of the next two hours, she had taken a grain of tartar emetic and eight drops of creasote, without the nausea continuing or returning. As her face was flushed, and she complained a good deal of frontal headache, the creasote was discontinued. Unfortunately the pulse was not counted before the experiment; but Dr. C.'s dis-

\* Each dose contained a quarter of a grain of the tartrate of antimony.

tinct impression at the time was, that it was then stronger and fuller than afterwards. CASE.—In the other case, a grain of tartar emetic was dissolved in water, and the patient, a stout young man, ordered to take a table-spoonful every half hour, till he vomited. After taking half of the mixture, violent vomiting and retching came on, when he took three drops of creasote. This only moderated the symptoms; after five minutes, three drops more were administered, which completely stopped the vomiting. The paucity of his observations, Dr. C. stated, did not entitle him to advance any suggestions as to the application of these cases to therapeutics; but he thought that they are at least sufficient to show, that creasote can control the operation of tartar emetic. As opportunities occur, he intends to prosecute this branch of the subject.

"In *Neuralgia*, creasote has, in the opinion of many, been found useful; and from a knowledge of the sedative properties of the substance, along with some experience of it in this class of diseases, Dr. C. can easily believe that it may prove beneficial. The nine cases in which he has employed it, lose almost entirely their value as experimental provings of its curative powers of neuralgia, inasmuch as he had in them all purged the patient steadily, and sometimes very actively, with croton oil, generally employing the creasote simply as a palliative during the paroxysms, just as at other times we prescribe henbane, the muriate of morphia, and aconite. Here it is proper to speak guardedly; but from all Dr. C. has seen and read, he thinks it may turn out to be a good medicine to use under certain circumstances in neuralgia. Creasote plasters have of late been recommended in the journals; and a tar plaster is a favourite remedy for tic among sailors. The unquestionable relief from pain which creasote gives in toothache, is also a strong reason for making trial of it as an outward application in the different forms of neuralgia. When an opportunity offers, he intends to try the effect of creasote plasters along the course of the affected nerves.

"In *Phthisis*, some have maintained that creasote is quite a specific remedy, having the power of dissolving tubercle, and cicatrizing cavities in the lungs; but which of the drugs in our voluminous catalogue of materia medica have not in their turn been celebrated as all-potent in conquering what, we fear, must yet be called this *invincible* disease?

"It has already been said, that creasote is useful in checking the vomiting of the latter stages of consumption; and when it is added, that its vapour sometimes produces a soothing effect, and makes the expectoration more easy, all that can be truly advanced of its uses in this disease has been stated. The vapour may be inhaled in the steam of hot water, placing the vessel under the mouth of the patient; or if this cannot be borne, the air of the apartment may easily be sufficiently saturated with the vapour, by allowing the steam of creasote water to escape for a certain time.

"II. CREASOTE AS AN EXTERNAL APPLICATION.—In *toothache*, creasote generally gives immediate relief from pain, when properly applied to the exposed nerve, in the cavity of a carious tooth. Dr. C. has in his own person made repeated trials of it, and is quite convinced, that though it gave respite from pain, it hastened the destruction of the teeth. This observation has been repeatedly made by others.

"In *arresting hemorrhage* from small vessels, or the oozing of blood from abraded or cut surfaces, bleeding ulcers, and leech bites, a creasote ointment or lotion is very often effectual. It acts by coagulating albumen, and thus forming a crust. Pure creasote may be tried when the bleeding is more profuse. In the hospital at Cadiz Dr. C. saw it used with complete success, in the oozing of blood from the wound of a compound fracture. He never had an opportunity of seeing its power over pretty active hemorrhage, in the human subject, except in this case.

"From experiments made on dogs and rabbits he is, however, quite satisfied that creasote possesses, in a high degree, the power of arresting hemorrhage from the capillaries; but in wounds, which it is desirable should unite by the first intention, its use should probably be abandoned as soon as the bleeding is fairly subdued, as, by uniting with the lymph effused, it forms a substance,

which would act as injuriously to the progress of the reparative process, as any other foreign body.

"In *chronic venereal ulcers*, Dr. C. has repeatedly used creasote with great advantage. It answers very well to apply it pure *once*, when there is great deficiency of action, and subsequently to employ an ointment of from four drops to thirty, to the ounce of lard. The lotion is also a very excellent form of application. In *phagedenic ulcers, ulcerated chilblains*, and sores yielding a sanious discharge, Dr. C. has often used creasote with great benefit.

"In the application of creasote to ulcers and other solutions of continuity, there are several facts which the practitioner should bear in mind. *It is important to remember that water only dissolves one eightieth part.* If an excess of creasote be present, it will float on the surface in small globules, and can therefore very easily be removed: but if this is not done, when the lint is dipped in the lotion, these globules will adhere, and in this way, a very different wash from what was intended, is placed upon the sore. In very few cases, where the raw surface is extensive, pure creasote ought to be applied to the whole of it, as severe irritation is generally the result. More or less inflammation, almost in every case, follows the application of the pure drug to a raw surface: it continues, according to circumstances, from a few hours to several days, and there are instances in which a poultice is quite necessary. At the beginning of the treatment, creasote, either pure or in the form of lotion, should be more copiously applied than afterwards: and as soon as a healthy granulating surface appears it may with advantage be altogether discontinued, and some of the common lotions of the metallic salts substituted. When the ointment is applied to an irritable sore, it answers very well to put a poultice above it. To chancres, creasote ought to be applied with a camels' hair pencil. One or two applications are frequently sufficient, and more may do harm.

"In a case of condylomata Dr. C. found creasote useful: and in correcting the fetor of vaginal discharges he has also several times been assured by his patients that it proved successful, but as a *remedy* for the running it is very inferior to lotions of sulphate of copper, and sulphate of zinc, and the other common washes. He draws these conclusions partly from cases which he saw treated in the Lock Hospital of Edinburgh some years ago.

"In narrating the result of most of the trials which he had made with creasote, the author stated that he offered them, not as in themselves of much value, but merely as a contribution towards a proving of its real therapeutic value. In some other diseases in which he used it, it did no good, and in some evil; but as these were maladies to which he had not adverted, it was better to defer a statement regarding them. They were cases of diabetes, dyspepsia, rheumatism, irritable bladder, and cancer. Its effects in these cases, and in skin diseases, may, at a future time, be brought before the society."

10. *Manna*.—"In the mountains above Tropæa, are large tracts of chesnuts, and the small leaved ash, the *omas*, which produces the manna. They do not plant it, but cut down the strong stems, and spring it from the old stocks. In July, they make a small gash, leaning upwards; the second day another, and form cups with maple leaves, into which the gum exudes.

The tyranny exercised on the poor peasants in this article is very great. The manna is farmed out, and a certain number of countrymen are appointed to gather it, during which time they are not at liberty to absent themselves, or undertake the most necessary labours for themselves. They scarcely derive any benefit from their work, as they are paid five carlini for a rotulo of manna (thirty-three ounces) which the farmers sell in Naples for nine carlini a pound (twelve ounces). If they burn or destroy the trees, though wild, their punishment is very severe, and if the smallest quantity is found in their houses, they are sent to prison. Eight hundred poor men, thus oppressed, contributed two carlini apiece, for a memorial to the king, but no notice was taken of it."—*Swinburne's Courts of Europe at the end of the last century.*

T. R. B.



11. *Sialagogues*.—Dr. Samuel Wright has published an elaborate and learned essay on the *Physiology and Pathology of the Saliva*, in the *London Lancet*. Among other matters, he enumerates incidentally, the various medicinal substances, which, in addition to mercury and its compounds, have been known to induce salivation. Although the fact is well understood concerning most of them, yet it may be useful to enumerate the whole in consecutive order.

1. Iodine and its salts sometimes act as remote sialagogues. *Authorities* Carro, quoted by Bayle; Dr. Manson, Cogswell's Essay on Iodine.

Hydriodate of potash has induced ptyalism, as observed by Drs. Clendenning and Wallace, and Dr. Wright himself. Cantu, Coindet and Gairdner have detected iodine by chemical tests, in the saliva of persons who are taking it.

2. *Chlorine*.—The continued use of chlorine water is said to have caused salivation. Pereira.

3. *Bromine*.—Dr. Glover produced ptyalism in dogs and rabbits by the administration of single poisonous doses of it.

4. *Digitalis*.—A case is recorded in Rust's Magazine, in which the salivary discharge continued for three weeks. Other authorities. Withering, Christison, Barton.

5. *Hemlock*.—The injection of a watery solution of hemlock into the veins of a horse has been known to produce salivation (Moiroud). Dr. Wright has known a case in the human subject from the protracted use of hemlock.

6. *Belladonna* sometimes affects the salivary glands.

7. *Arsenic*.—*Authorities*.—Marcus, Ferriar, Furley, Trousseau and Pidoux; James Johnson.

8. *Opium*, sometimes. *Authorities*, Christison, Paris, Watson.

9. The Salts of *Antimony*, particularly tartar emetic and James' powder. Magendie produced salivation in dogs by tartar emetic. So also Griffiths Jackson in the human subject. Dr. Wright has seen an active ptyalism, for a week, consequent on the use of James' powder.

10. The Salts of *Lead* occasionally.

11. *Terchloride of Gold*.—Chrestien, Niel.

12. *Prussic Acid*.—Macleod, Granville.

13. *Nitric Acid*.

14. *Nux Vomica*.—In a case of poisoning by it, a profuse ptyalism has been observed.—*London Medical Repository*, Vol. 19.

15. *Cantharides*.—Pereira mentions an instance of poisoning by it, in which ptyalism occurred.

16. *Sulphur* used internally increases the salivary secretion. T. R. B.

12. *Pharmaceutical Bread*. By HENRY DEANE.—Flour, 3lbs. imperial; cold water, 1½ pint imperial; sesquicarbonate of soda, ½ oz. (Troy weight); hydrochloric acid, 5 fluid drachms; a small quantity of salt, if required.

Mix the soda perfectly with the flour, and the acid with the water, then the whole intimately and speedily together, using a flat piece of wood or spaddle for that purpose, in preference to the hand. It may be made into two loaves, and put into a quick oven immediately. It will require about an hour and a half to bake.

*Precautions*. Let the soda be well mixed with the flour, for wherever a small lump of it is deposited unmixed, it is not perfectly acted upon by the acid, and causes a yellow spot in the loaf, which, however, is more unsightly than detrimental.

The acid is the muriatic of commerce, and should have a specific gravity of 1.16. It should be mixed with the whole of the water to be employed.

The water should be as cold as possible. Three pounds of flour require about a pint and a half to make it into dough of proper consistence: but as the quality of flour varies according to season, and other circumstances, a little more or less water may be used, as occasion may require.

The dough should not be made stiff. The thinner it is, so that it may be conveniently handled, the lighter will be the bread. Much kneading is detrimental.

The largest quantity of flour that can be conveniently mixed at one time is about 12 lbs.; where more is required, it is better accomplished by mixing it separately.

It requires a hotter oven and more time to bake than fermented bread does.

The advantages to be derived from this process are important. In all climates and under all circumstances it may be adopted; and by it is entirely obviated all difficulty of procuring yeast or ferment, which is frequently of an inferior quality, vitiating the bread, and rendering it more or less unwholesome.

The bread being free of all yeasty particles, is more digestible, and not so liable to create flatulence, or turn acid on weak stomachs, as fermented bread is apt to do, even when of the finest quality.

It is a great saving of time, trouble, and litter, and may be employed at all seasons of the year, without reference to temperature or atmospheric variations.

Economically, yeast may possibly have the advantage when plentiful and good; but when scarce and bad, a common state of things during the summer months, particularly in remote districts, the saving of time, trouble, and risk, is invaluable. Where much bread is made for a family, as at some farm-houses, by purchasing the materials in large quantities, a considerable saving may be effected.—*Pharmaceutical Trans.*, No. 9.

13. *Phloridine*.—This is a new medicine, which is now very highly spoken of by French practitioners as a useful adjunct to our cinchona preparations. It has been used for some years in Germany, Poland, and France. It is extracted from the bark of the roots of the apple-tree and the wild cherry-tree, and is thus prepared: the bark of recent roots is boiled with water sufficient to cover them, for half an hour. This is poured off, and the same quantity is again used; these two fluids are mixed together, and at the end of six hours deposit the phloridine in the form of a deep-red velvety-looking matter.

M. Lebaudy, the editor of the *Journal des Connaissances Médico-Chirurgicales*, says, "its efficacy is so decided, that we cannot hesitate to class it with the most powerful febrifuges; and it has this advantage over quinine, that it never induces gastralgia."—*Braithwaite's Retrospect*, No. 5.

14. *Quinine found in the Urine and in the Blood*.—On examining the sediment formed in the urine of a patient to whom quinine had been administered, on account of periodical nervous pains, M. Landerer found, besides the phosphate and urate of lime, and carbonate of ammonia, a small quantity of quinine in a free state. The urine itself contained sulphate and hydrochlorate of ammonia, and also some traces of quinine. In two other patients to whom quinine had been administered for the cure of intermittent fevers, M. Landerer endeavoured to discover this alkaloid substance in the blood. One was bled for a pleurisy which supervened; the blood was inflammatory, and the coagulum covered with a thick buffy coat. When first drawn from the vessel, and so long as it preserved its heat, it had but a very slightly bitter taste; but after it had become cold, and the formation of the clot had taken place, the bitterness was very marked. A perceptible difference was discernible between the serum and the coagulated portion, the bitter taste being most marked in the former, and the quinine could be obtained from it by evaporation; then digesting the residue in acidulated water, filtering, and precipitating it by ammonia. In the second patient the analysis of the serum gave exactly similar results. *London Med. Gaz.* July 1842, from *Repertorium für die Pharmacie*.